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March 3, 1983

To: Local Board of Health and Neighbourhoods Committee

Subject: The Unequal Society: A Challenge to Public Health

Origin: Medical Officer of Health and Commissioner of Planning and Development, March 3, 1983 (c34hlth83021:156)

Comments:

Attached is the report, The Unequal Society: A Challenge to Public Health. This report, which examines the impact of poverty on health, emerged as a follow up to Public Health in the 1980's. The report provides a mutual focus for the long-standing concerns which the Department of Public Health and the Planning and Development Department have had about the problem of poverty in Toronto.

The report documents the strong relationships between factors such as unemployment, welfare dependency, low income and low social status on the one hand, and illness and mortality on the other hand. It is noted that there are significant gaps in information about the effects of poverty on low-income Torontonians.

The report recommends a comprehensive examination of the health status of Torontonians, particularly low-income residents. It also recommends a renewed commitment to preventive health planning and programming, co-ordinated research, public education and advocacy as responses to persistent social and economic inequalities.

Recommendation

That the Local Board of Health and the Neighbourhoods Committee adopt this report and its recommendations.

A.S. Macpherson, M.D., M.Sc.
Medical Officer of Health

Stephen G. McLaughlin
Commissioner of Planning
and Development

EM/kym
Attachment

CITY OF TORONTO
DEPARTMENT OF PUBLIC HEALTH

CITY OF TORONTO
PLANNING AND DEVELOPMENT DEPARTMENT

THE UNEQUAL SOCIETY: A CHALLENGE TO PUBLIC HEALTH

SUMMARY REPORT

March 1983

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ACKNOWLEDGEMENTS

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Nancy Duffy provided valuable insights as both a nutritionist and a single mother.

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I. INTRODUCTION

The policy statement on the social environment in the report, Public Health in the 1980's established a mandate for the Department of Public Health to examine and address the impact of social and economic conditions on the health of Torontonians. Underlying the shift in focus to the social environment was a new healing philosophy. Prevention in public health programming was emphasized, and it was acknowledged that substantial improvements in the health of the population were less and less likely to be achieved through medical-technological means.

Recognition of the effects of the social environment on health has led the Department to investigate the implications of such conditions as: the proliferation of chemicals and toxic substances; the use of video-display terminals; sexist bias in regulations governing women's health products; and gaps in services to de-institutionalized adults. These investigations embraced a central theme within the new healing philosophy: that it is necessary to look beyond the suffering individual to processes in the economy, the workplace, the community, and the family in order to locate and mitigate some of the causes of ill health.

The Unequal Society: A Challenge to Public Health follows the direction established by Public Health in the 1980's. The Unequal Society report looks at poverty as a health issue. The purposes of the report are as follows:

1. to summarize research findings which document the relationship between poverty and health;

2. to discuss the relevance of these findings to the City of Toronto;

3. to recommend strategies for increased responsiveness to the health needs of Torontonians who live in poverty.

Public Health in the 1980's identifies the significant relationship between poverty and health. The report states:

> "The economic and social realities of the society in which we live have an important impact on our health. Healthful living conditions are costly, and those in financial need are less able to afford those conditions. The structure of our industrialized society is such that many people have lost the opportunity to protect their own self-interests in health matters." (Local Board of Health 1978, p.57).

Poverty is not a new municipal issue. There are a number of groups in Toronto who live in poverty. They include the elderly, people receiving social assistance, the unemployed, disabled

persons, the working poor, and de-institutionalized adults. An extensive framework of human services exists to deal with poverty -- through income support, shelter subsidies, health benefits, community programs, and so on.

However, there are significant gaps in the information which is needed to respond with maximum effectiveness to the health needs of the City's poor populations. For example, while the City collects local data on mortality and natality -- the causes of death among adults and new-born infants -- it has virtually no information on morbidity, or illness. Without knowing what illnesses exist in the population and why, it is difficult to do preventive health planning effectively.

In Toronto, the relationship between poverty and illness among City residents is not well understood. No research has been done at the municipal level to document the ill effects of social and economic deprivation. What we now possess is the accumulated wisdom of community workers and the life experiences of poor people themselves. While this is useful, it is not an adequate basis for designing preventive services and evaluating their effectiveness.

Research in industrialized nations shows a strong relationship between poverty and illness. In the United States, Canada, and the United Kingdom, researchers who have investigated the health status of different income strata have found that the highest-income group enjoys a life expectancy which exceeds that of the lowest group by approximately seven years (Wigle and Mao 1980, p.4). Further, these two groups experience differing degrees of freedom from illness throughout their lives. The lowest-income group suffers from higher rates of disease and mental illness compared to the highest-income group. (U.S. Health, Education and Welfare 1979; Central Statistical Office 1975; Wigle and Mao 1980).

These findings suggest that in advanced industrial societies, a person's health may be significantly related to income, education, occupation and other socio-economic factors. Even with sophisticated health care systems and public commitments to provide equal access to health care, equal levels of health for rich and poor do not exist.

Since it is an objective of the Department of Public Health to maintain and improve the health status of all residents of the City, it is important to examine the impact which social and economic inequalities may be having on particularly vulnerable groups. This report, by looking at the relationship between ill health and the conditions of disadvantage in the social

environment, is intended to contribute to a more informed framework for preventive health planning and programming.

II. POVERTY AND HEALTH - A SOCIO-ENVIRONMENTAL APPROACH

The socio-environmental approach requires that health practitioners make societal systems the targets for research, public education, advocacy and change. Good health results from the dynamic relationship between individuals and the systems in society that distribute health opportunities. An individual is connected to systems which influence the chances for a healthy life - the school, the occupational structure, the municipal services system, the national political economy and international relations. Poverty often reduces access to these opportunities and thus to the conditions which sustain good health.

Poverty

One of the major obstacles facing any attempt to examine adequately the poverty/health relationship is that there is a lack of concensus about how poverty and health should be defined and measured. Poverty is commonly understood to be a condition of social and economic disadvantage. Yet, there is no agreement about how it should be quantified. Two methods are frequently used: the first defines poverty as a problem of inadequte income; the second associates poverty with the problem of income inequality.

Defining poverty as inadequate income involves specifying the amount of money that households of various size require to purchase goods and services that will meet their needs. Poverty is said to occur when there is a shortfall of income from this budgetary minimum. According to this calculation, called the adequate budget method by the Social Planning Council of Metropolitan Toronto, a Toronto couple with two school-aged children required a minimum yearly income of $19,147 in 1982 to remain out of poverty. (Social Infopac 1982, p.4)

The method used by Statistics Canada to indicate poverty states that if an individual or family spends more than 62% of gross income on the basic necessities of food, clothing and shelter, then they are considered poor. According to this standard, a Toronto family of four was in poverty if household income in 1982 was below $16,065 (National Council of Welfare 1982).

Researchers who consider poverty to be a problem of income inequality maintain that it must be defined relative to the ability of the community to financially support decent living conditions. Using this rationale, the Special Senate Committee on Poverty and the Canadian Council on Social Development equate poverty with a percentage (usually 50 to 55%) of average Canadian family income. Thus, a Toronto family of four would require an income between $16,000 (CCSD) and $17,920 (Senate Committee) to remain above the poverty line in 1982 (National Council of Welfare 1982).

The concept of poverty as relative deprivation has been developed most extensively by Peter Townsend. His formulation includes a determination of cash income plus the resources which are considered basic in a developed society - capital assets, employment and social service benefits. This view implies that community standards must be considered in conjunction with income measures to judge whether a household is poor. Townsend's approach to poverty has not yet been applied in a Canadian context.

The limitations of prevailing definitions of poverty emphasizes the need for Toronto-based research using as comprehensive a definition of poverty as possible.

Health

Medical practitioners have been the dominant group which has shaped our understanding of health. This has resulted in an emphasis on clinical interpretations of health as the absence of illness, disease or injury. (Gage 1976, Webster 1970, Oxford 1980). The health of a community thus tends to be judged by the extent to which its people become sick, get maimed or die.

The traditional concern with individual pathology and bio-medical symptoms of illness has diverted attention from socio-environmental factors. Until recently, problems like unemployment, occupational stress, homelessness, racism and family break-up have been ignored as risk factors to public health.

The World Health Organization suggests that health should be seen as something more than the absence of illness:

> Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (World Health Organization 1947).

This report advocates a proactive concept of health like that of the World Health Organization. This means that in examining the relationship between poverty and illness, both bio-medical and socio-environmental causes of illness should be investigated. This proactive concept of health also implies that health practitioners must identify those conditions in the social environment which maximize good health in the community.

Mortality Data

The Health and Welfare Canada study, Mortality by Income Level in Urban Canada, shows a strong correlation between level of income and incidence of mortality. Low-income Canadians suffer higher rates of mortality than high-income Canadians, regardless of the pathology. What is particularly significant is that the high physical and social risk inherent in life situations of poor people is dramatically reflected in the mortality rate. Poor persons, to a much greater extent than high-income individuals, die from accidents, poisonings, violence, respiratory and digestive diseases. (Wigle and Mao 1980).

Mortality by Income Level in Urban Canada also points out that:

- Infants of either sex and males in age groups 1 and 14 and 34 to 64 in income level 5 (low income) experienced mortality rates almost twice as high as those for income level 1 (high income).

- Men in Canada, Finland and the United States in the highest income category had a life expectancy that was six to seven years greater than men in the lowest income category.

- Women in Canada and the United States in the highest income group had a life expectancy that was three to six years greater than women in the lowest income group (Wigle & Mao 1980).

Specific groups, such as native people, are particularly vulnerable to the ill effects of poverty. Native people are found to have a life expectancy 22 years less than the average Canadian. In 1976, the average age at death "for registered Indians of both sexes was approximately 44 years". (Wilkins 1980, p.21)

The differing mortality rates can be simply translated: the poor die younger.

Morbidity Data

Morbidity is a primary concern to the development of public and preventive health policy. It is illness over a lifetime which affects the quality of people's lives -- the ability to work, to play, and to participate in the activities of society.

In July 1981, The Health of Canadians, a report of the Canada Health Survey, pointed out the correlation between morbidity and income. The study documents the major problems associated with severe disability -- back, limb and joint disorders, arthritis and rheumatism, heart disease, mental disorders and hypertension, and shows that low-income people suffer disproportionately from these diseases. The study also reveals that large numbers of Canadians experience emotional distress. These individuals are concentrated in the following groups: women, teenagers, and the elderly, the widowed, divorced and separated, low-income people, and those who are inactive for health or other reasons. (Canada Health Survey 1981). One of the shared characteristics influencing the lives of these people was inadequate income.

Two acknowledged sources of pathology are smoking and alcoholism. The Health of Canadians found that smoking was directly related to an individual's occupation and employment status. Daily cigarette smoking is clearly more prevalent among unemployed persons and blue-collar workers than it is among those in managerial and professional occupations.

Problems related to alcohol consumption are a concern equally for poor people and for the affluent. However, poor persons have less opportunity to cope with the problems associated with drinking. They are more vulnerable to the health risks associated with alcohol toxicity -- unemployment, malnutrition, and "bottoming out". (Labonte and Penfold 1981, p.10)

There is some evidence that illnesses associated with poverty result in increased health expenditures. This is a major incentive for addressing poverty-related morbidity. In 1976, the Ontario Council of Health published a book entitled An Estimate of the Economic Burden of Ill-Health. The evidence indicates that it is very costly to be sick. The estimated economic burden of direct and indirect costs for ill-health is placed at $2,976,636,993.

A ranking of the diagnostic categories for the indirect burden, that is, mortality and morbidity, indicates that the first six

categories of diagnosis make up for 86.8% of the total economic burden. The categories are: cardio-vascular diseases, accidents, cancers, mental, digestive, and respiratory aliments. (Ontario Council of Health 1976, p.35) These diseases, according to the Health of Canadians, are most prevalent among lower socio-economic groups.

III. THE SOCIAL ENVIRONMENT OF POOR PEOPLE

Poor physical environments can inhibit good health practices. Individuals and families with low incomes often live in housing which is poorly maintained, poorly heated and overcrowded. These conditions can promote the contraction and communication of disease. They also may lead to or aggravate depression, anxiety and emotional breakdown. (Special Senate Committee on Poverty 1976, p.124).

Neighbourhood environments with high traffic densities, high levels of vehicular and industrial pollution, and a scarcity of park space are dangerous, especially for children. Yet low-income housing is often located in these kinds of neighbourhoods. (Harvey 1973, Saarinen 1976).

Poverty also can limit the quality of food that people consume. Improper diet affects susceptibility to disease and infection and is particularly serious for the children of poor families whose learning ability may be linked to malnutrition. Low-income consumers commonly shop at discount food stores. These outlets often stock items which are slightly damaged, on which the "best before" date has expired or which come from salvage operations. While routine inspections are made and these products are seldom hazardous, their nutritional value is open to question. Goods of this kind have limited appeal to average consumers. However, low-income shoppers are forced to trade off savings for food which is frequently beyond its nutritional peak.

Poor people often are unable to afford clothing appropriate for changing climatic conditions. Teachers in Toronto frequently report that students from low-income families arrive at school during winter wearing only a sweater as a coat, or running shoes for boots.

Parents who have little money for child care services often are forced to leave their children in poorly supervised environments. The document, Mortality by Income Level in Urban Canada, has recognized inadequate daycare as an important factor in the high

accident rates among low-income children. (Wigle and Mao 1980, p.17)

Poor people have relatively limited access to sports and cultural activities. Healthy lifestyles can involve considerable expense -- on sports equipment, facilities, transportation, and baby-sitting costs. Low-income people do not have equal access to the resources which support a healthy lifestyle.

The Occupational Environment

A recent study shows that approximately one million family units in urban Canada could be considered working-poor. The working poor frequently earn their ill health and shortened lives by working long hours with outdated and dangerous equipment in environments with poor lighting, ventilation and heating. They must endure the hardships of piece work, of oppressive methods of supervision, and of unstable employment conditions. (Lorrain 1981: Johnson and Johnson 1982, pp. 67-83).

Within the labour market, poor workers function to provide a source of cheap labour to fill the unskilled jobs in the marginal sector of the economy. This role confers low social status, is intellectually, psychologically and emotionally unfulfilling, and is economically exploitative.

Occupational Health and Safety legislation does not provide adequate protection for many low-income workers. Significant segments of the low-wage sector, such as industrial home-workers, domestics and office and clerical workers, are not covered under Bill 70, Ontario's Health and Safety Act.

Thus, the working conditions of the poor contribute to their ill health in two ways: (i) they are a major cause of the high levels of anxiety and tension which characterize life in poverty and (ii) they place the poor in physically dangerous work environments.

Research investigating the health of the unemployed links unemployment with a variety of psycho-social health problems. Unemployment may mean: increased social isolation; greater tendency for alcoholism and drug abuse; increased rates of suicide and crime; increased family discord and child abuse.

In the United States, monetary costs have been calculated for the health impacts of unemployment. It was found that the total bill for an extra 1.4% rise in unemployment over five years was estimated to be 6.6 billion dollars. (Brenner in Muszynski 1978, p.97)

As the most vulnerable segment of the labour force, the working poor bear a disproportionate share of the health costs imposed by unemployment and economic insecurity.

The Health Care System

For many poor people, bouts of ill health and the persistence of chronic illness are common occurrences. However, symptoms of illness which would receive early recognition by higher socio-economic groups often go unacknowledged by poor people until they reach a greater degree of severity or become incapacitating. Poor people simply cannot afford to acknowledge symptoms of illness and to respond with appropriate preventive or curative behaviours.

The approach of poor persons to medical care is often on an emergency basis. They seldom have a regular physician, and seek health care sporadically in outpatient clinics or emergency departments of hospitals. (Challenor, 1982).

In Ontario, the percentage of "opted-out" doctors has reached 15.5%. A recent study of extra billing in Ontario showed that patients who were extra billed were more likely to reduce or delay the use of medical services. This deterrent effect was stronger for low income people (National Council of Welfare 1982).

IV. POVERTY AND HEALTH: RELEVANCE TO TORONTO

It is difficult to assess precisely the effects that poverty is having on the health of Toronto residents. The City of Toronto Department of Public Health has birth data by census tract. It also has mortality and morbidity data for some infectious diseases. While these data are at least as good as most jurisdictions, they have marked limitations. Death certificate information is not fully reliable, particularly regarding diagnosis, and infectious diseases are substantially under-reported.

The Department of Public Health has been planning for some time to implement the Canada Health Survey on a probability sample of Toronto residents. This project has been delayed by recruitment difficulties and financial constraints. Such a survey would provide much better morbidity data than is now available.

Professor Murdie of York University has classified census tracts in Metropolitan Toronto on the basis of a number of socio-economic indicators derived from census data. This is based on the 1976

census and needs to be updated. It is possible to link deaths to census tracts at various socio-economic levels, but the socio-economic status of each deceased individual can not be inferred from these data. This may lead to false conclusions known as the ecological fallacy.

Data limitations therefore make it difficult to statistically demonstrate the linkages between poverty and health that have been found in other jurisdictions. However, the existence of poverty in Toronto is an undeniable reality. This suggests that a significant number of City residents may be particularly vulnerable to health risks.

Estimates based on data derived from the recent survey, Resident Attitudes Toward City Services, suggests that 20% of Toronto households are below the Statistics Canada Poverty Line (City of Toronto Planning and Development Department 1982).

Other research shows that a significant proportion of Ontario's social assistance beneficiaries live in Metropolitan Toronto. In 1980, about 27% of the Province's welfare recipients, (102,547 persons) were residents of Metropolitan Toronto (Miller et al 1981). Many of these individuals lived in the City of Toronto.

Although the precise number of working-poor individuals and families in Toronto cannot be determined, it is fair to say that Toronto is not unique among urban centres. A recent study shows that approximately one million family units in urban Canada could be considered working-poor. Of these family units, 35% lived in urban Ontario. (Muszynski and Krawetz 1981).

A recent Toronto Board of Health report examined the difficulties being experienced by de-institutionalized adults. In addition to the problem of inadequate supportive services for this group, the study found that low income was a serious problem. The report noted that since the maximum allowable benefit for single unemployable persons on General Welfare Assistance is $288 per month, and the maximum allowance for a single disabled person on Family Benefits is $364 per month, it is fair to say that half the pyschiatric patients discharged during the survey had an income below the poverty line (Local Board of Health, Report No.10, 1982, p.10). There are about 7,000 pyschiatric discharges every six months in Metropolitan Toronto alone. (Marshall 1982)

The children of low-income families are a particularly vulnerable group. In 1978, 8% of the City's children had parents who received Family Benefits compared to 4.3% of children in Metropolitan Toronto as a whole (City of Toronto Planning and Development Department 1982). In a statement prepared by

clergymen protesting the extent of poverty in Metropolitan Toronto, it was estimated that children represented 40,000 out of the 400,000 poor persons living in the Metropolitan area (Toronto Star, June 9, 1982).

Elderly persons are a significant segment of Toronto's population. According to the latest data available, 12.5% of City residents are 65 years of age or older (Statistics Canada, 1981 Census). Ian Potter observed that 58% of individuals over 70 years of age and 23% of families headed by persons 70 years old or more were poor according to Statistics Canada definitions. Over half, 55% of people over 65, had incomes low enough that they had to be supplemented by the income tested supplement, the Guaranteed Income Supplement (Social Planning Council of Metropolitan Toronto, 1979, p.10)

A life in poverty is the daily experience of a wide spectrum of Torontonians in all age groups. There is little doubt that many experience devastating health impacts as a result of their condition of disadvantage. The precise nature and magnitude of these impacts remains to be calculated.

V. CONCLUSIONS

It has been argued that, in large measure, the vulnerability of poor people to health risks is related to conditions in the social environment. These conditions include low income, inadequate living conditions, poor working conditions and insufficient access to health care services.

These conditions impose high health costs upon individuals and the community. Altering these conditions requires considerable effort across professional disciplines and in the various sectors inside and outside government. At the municipal level, research, planning, public education, advocacy and program delivery are the key instruments to effect change. These tools, used with a clearer understanding of the impact of poverty on the health of Torontonians, can play a vital role in the change process.

VI. RECOMMENDATIONS

1. That the Local Board of Health reaffirm the importance of collecting comprehensive data through a community health survey that will permit an assessment of the health status of all residents of the City of Toronto.

2. That the Medical Officer of Health study the health status of low-income residents of Toronto. This study should identify and investigate the effects of poverty-related factors on the health status of specific target populations including: elderly persons; the unemployed; social assistance recipients; children; deinstitutionalized adults; disabled persons; new immigrants; and racial and ethnic minorities.

3. That the Medical Officer of Health report on current programs and future plans for serving the health needs of low-income Torontonians, with a view to preventing the following conditions: inadequate nutrition; inadequate housing; environmental hazards; family violence; unemployment-related morbidity; occupational health risks; and inadequate access to health and social services.

4. That the Medical Officer of Health continue to develop a socio-environmental approach to health within the Department of Public Health.

5. That the Commissioner of Planning and Development work with appropriate agencies to develop a comprehensive data base which can be utilized by public health, social planning, human services, recreation and education agencies to determine the socio-economic characteristics and needs of agency client groups in the City of Toronto.

6. That the Local Board of Health recommend that City Council accept in principle the need to study the health, social and economic costs of poverty, unemployment and inadequate social assistance payments to the City of Toronto, and request the Medical Officer of Health to report on the resources required to undertake such a study.

CITY OF TORONTO
DEPARTMENT OF PUBLIC HEALTH

CITY OF TORONTO
PLANNING AND DEVELOPMENT DEPARTMENT

THE UNEQUAL SOCIETY: A CHALLENGE TO PUBLIC HEALTH

March, 1983

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I. INTRODUCTION

The policy statement on the social environment in the report, Public Health in the 1980's, established a mandate for the Department of Public Health to examine and address the impact of social and economic conditions on the health of Torontonians.

Underlying the shift in focus to the social environment was a new healing philosophy. Prevention in public health programming was emphasized, and it was acknowledged that substantial improvements in the health of the population were less and less likely to be achieved through medical-technological means.

Recognition of the effects of the social environment on health has led the Department to investigate the implications of such conditions as: the proliferation of chemicals and toxic substances; the use of video-display terminals; sexist bias in regulations governing women's health products; and gaps in services to de-institutionalized adults. These investigations embraced a central theme within the new healing philosophy: that it is necessary to look beyond the suffering individual to processes in the economy, the workplace, the community, and the family in order to locate and mitigate some of the causes of ill health.

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Poverty is not a new municipal issue. There are a number of groups in Toronto who live in poverty. They include the elderly, people receiving social assistance, the unemployed, disabled persons, the working poor and the de-institutionalized adults. An extensive framework of human services exists to deal with poverty -- through income support, shelter subsidies, health benefits, community programs, and so on.

However, there are significant gaps in the information which is needed to respond with maximum effectiveness to the health needs of the City's poor populations. For example, while the City collects local data on mortality and natality -- the causes of death among adults and new-born infants -- it has virtually no information on morbidity or illness. Without knowing what illnesses exist in the population and why, it is difficult to do preventive health planning effectively.

In Toronto, the relationship between poverty and illness among City residents is not well understood. No research has been done at the municipal level which documents the ill effects of social and economic deprivation. What we now possess is the accumulated wisdom of community workers and the life experiences of poor people themselves. While this is useful, it is not an adequate basis for designing preventive services and evaluating their effectiveness.

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These findings suggest that in advanced industrial societies, a person's health may be significantly related to income, education, occupation and other socio-economic factors. Even with sophisticiated health care systems and public commitments to provide equal access to health care, equal levels of health for rich and poor do not exist.

Since it is an objective of the Department of Public Health to help maintain and improve the health status of all residents of the City, it is important to examine the impact which social and

economic inequalities may be having on particularly vulnerable groups. This report, by looking at the relationship between ill health and conditions of disadvantage in the social environment, is intended to contribute to a more informed framework for preventive health planning and programming.

II. POVERTY AND HEALTH: A SOCIO-ENVIRONMENTAL APPROACH

The socio-environmental approach recognizes that, in health matters, individuals do not totally control their fates. Good health or illness results from dynamic relationships between individuals and the systems in society that distribute health opportunities. Starting from the micro-environments of the home and family, the individual is connected to increasingly larger systems which influence the chances for a healthy life -- the school, the occupational structure, the municipal services system, the national political-economy, and international relations.

The connections between individual circumstances and larger systemic influences make it necessary to extend problem-solving approaches beyond the individual and into the environment. This has important implications for health policies and programs. It means, for example, that a thorough investigation of child malnutrition does not stop with the finding that parents lack knowledge about adequate meal preparation. It becomes important to know whether local retailers stock nutritious foods and further, if the profit-making policies of the food industry reduces the affordability of a healthy diet.

The socio-environmental approach requires that health practitioners make societal systems the targets for research, public education, advocacy and change. From this standpoint, the systemic roots of poverty become a health concern. It is apparent that the systems which distribute income, education, jobs, housing, food and socio-health services also allocate health opportunities; they provide the material conditions which make good health possible. Also, it is apparent that these systems can operate in an imbalanced way which impedes people's access to health opportunities. This report documents how social and economic disadvantage acts as a barrier which can induce illness. A challenge to public health is to identify further and address these imbalances and the constraints which they place on poor people's chances to be healthy in Toronto.

A. POVERTY

One of the major obstacles facing any attempt to examine adequately the poverty/health relationship is that there is a lack of concensus about how poverty and health should be defined and measured. Poverty is commonly understood to be a condition of social and economic disadvantage. Yet, there is no agreement about how it should be quantified. Two methods are frequently used: the first defines poverty as a problem of inadequate income; the second associates poverty with the problem of income inequality.

(i) Poverty as Inadequate Income

Defining poverty as a problem of inadequate income means specifying the amount of money that households of various size require to purchase goods and services that will meet their needs. Basic household needs for food, clothing, housing, health care, transportation and other items are costed-out in the market place to yield a budget which represents the minimum income that a household would have to sustain itself. Poverty is said to occur when there is a shortfall of income from this budgetary minimum. According to this calculation, called the adequate budget method by the Social Planning Council of Metropolitan Toronto, a Toronto couple with two school-aged children required a minimum yearly income of $19,147 in 1982 to remain out of poverty. (Social Infopac 1982, p.4)

Statistics Canada's Low-Income Cut-Off Lines are widely regarded as official indicators of poverty. Statistics Canada considers an individual or family to be poor if more than 62% of gross income is spent on the basic necessities of food, clothing and shelter. According to this standard, a Toronto family of four was in poverty if household income in 1982 was below $16,065. (National Council of Welfare 1982, p.4). The poverty levels for households of various sizes can be found in Appendix I.

(ii) Poverty as Income Inequality

Neither the adequate budget method or the Statistics Canada approach fully capture the relative meaning of hardship because they are not directly related to the structure of income distribution throughout society.

Canada is a stratified society characterized by pronounced inequalities in the distribution of wealth. For 1980 it was estimated that the bottom 20% of Canadian families had only 5.9%

of total family income. The top 20% of families, in contrast, received 38.5% of total family income -- six and one-half times the poor group's share (National Council of Welfare 1982, Table 6).

This unequal pattern of income distribution, in percentage terms, has remained virtually unchanged for at least thirty years. The shares of total income by income quintile for the last three decades are shown in Appendix II. The effect of the operation of the tax system and the welfare system has been to nullify any real redistribution of income between the upper and lower strata.

As David Ross points out:

> ... government spending has improved the welfare and incomes of the poor, but what is not as well known is that this same system also invariably benefits the rich so that in terms of relative income, nothing changes very much (Ross 1980, p.vii).

Those who consider poverty to be a problem of income inequality maintain that it must be defined relative to the ability of the community as a whole to financially support decent living conditions. It is argued that poor people share similar consumer values with everyone else, but because of inequitable income distribution poor persons have relatively less income to achieve society's standards. Using this rationale, the Special Senate Committee on Poverty and the Canadian Council on Social Development (CCSD) equate poverty with a percentage (usually 50 to 55%) of average Canadian family income. According to these two organizations, a Toronto family of four would require an income between $16,000 (CCSD) and $17,920 (Senate Committee) to remain above the poverty line in 1982 (National Council of Welfare 1982, p.4). Comparisons of Statistics Canada, CCSD and Senate Committee poverty lines are shown in Appendix III.

(iii) Poverty as a Shortfall From Community Standards

The concept of poverty as relative deprivation has been developed most extensively by Peter Townsend. His formulation goes beyond the conventional practice of looking at cash income to determine adequate living standards; it includes the resources which have come to be considered basic in a developed society -- capital assets, employment benefits and social service benefits. He states:

> Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved in the societies to which they belong (Townsend 1979, p.31).

This view implies that community standards must be considered in conjunction with income measures to judge whether a household is poor. People's needs for housing, clothing and even food are seen to be heavily influenced by social norms. The educational, occupational, income distribution and communications systems create wants and expectations which are informally and formally used in society as standards to measure individual achievement. Poverty is therefore understood in relation to what the community regards as decent living standards; poverty represents a condition of shortfall from these standards. Townsend's approach to poverty, while comprehensive, has not yet been applied in a Canadian context.

(iv) Limits in Current Poverty Definitions

Existing poverty definitions do not really convey what it means to be poor. Statistical measures, such as minimum budgets and poverty lines, do not provide an adequate description of the living conditions that are required by different groups to maintain well-being. The poverty line for single persons, for example, is intended to describe the minimum income needed by both a widow in her own home and an ex-psychiatric patient in a community hostel. Yet the nutritional, clothing and housing needs of these two individuals -- and the costs of meeting these needs in the settings they find themselves in -- could differ greatly. Further, more attention must be paid to the constraints that poverty places on the development of supportive social relationships. Although the importance of such relationships is often understated in poverty research, they may be critical factors in sustaining good health and well-being.

The limitations of prevailing definitions of poverty emphasizes the need for Toronto-based research using as comprehensive a definition of poverty as possible. This report does not attempt such a definition. Instead, it uses existing definitions and evidence of poverty in the belief that the poverty/health relationship can be reasonably demonstrated now. The demonstrated relationship should, in turn, prompt more precise locally-based research, analysis and program planning.

B. HEALTH

(i) Definitions

Medical practitioners have been the dominant group which has shaped our understanding of health. This has resulted in an emphasis on clinical interpretations of health as the absence of illness, disease or injury. (Gage 1976, Webster 1970, Oxford 1980). The health of a community thus tends to be judged by the extent to which its people become sick, get maimed or die.

The traditional concern with individual pathology and bio-medical symptoms of illness has diverted attention from socio-environmental factors. Until recently, problems like unemployment, occupational stress, homelessness, racism, and family break-up have been ignored as risk factors to public health.

The World Health Organization suggests that health should be seen as something more than the absence of illness.

> Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (World Health Organization 1947).

This report advocates a proactive concept of health like that of the World Health Organization. This means that in examining the relationship between poverty and illness, both bio-medical and socio-environmental causes of illness should be investigated. This proactive concept of health also implies that health practitioners must identify the conditions in the social environment which maximize good health in the community.

(ii) Mortality Data

The Health and Welfare Canada study, Mortality by Income Level in Urban Canada, shows a strong correlation between level of income and incidence of mortality. Low-income Canadians suffer higher rates of mortality than high-income Canadians, regardless of pathology. The high physical and social risks inherent in the life situations of poor people are dramatically reflected in the mortality data. Poor persons, to a much greater extent than high-income individuals, die from accidents, poisonings, violence, respiratory and digestive diseases. (Wigle and Mao 1980).

The report points out that:

- Infants of either sex and males in age groups 1 to 14 and 34 to 64 in income level 5 (low income) experienced mortality rates almost twice as high as those for income level 1 (high income).

- Men in Canada, Finland and the United States in the highest income category had a life expectancy that was six to seven years greater than men in the lowest income category.

- Women in Canada and the United States in the highest income group had a life expectancy that was three to six years greater than women in the lowest income group. (Wigle and Mao 1980, pp.6-18).

Specific groups, such as native people, are particularly vulnerable to the ill effects of poverty. There are documented levels of disparity in life expectancy between native people and other Canadians. Native people are found to have a life expectancy 22 years less than the average Canadian. In 1976, the average age at death "for registered Indians of both sexes was approximately 44 years". (Wilkins 1980, p.21)

The differing mortality rates can be simply translated: the poor die younger. Appendix IV provides statistics on the differential mortality rates of persons in high- and low-income levels. Appendix V presents data on life expectancy by sex and income.

(iii) Morbidity Data

Morbidity is a primary concern in the development of preventive health policy. It is illness over a lifetime which affects the quality of people's lives -- the ability to work, to play and to participate in the activities of society.

In July, 1981, The Health of Canadians, a report of the Canada Health Survey, pointed out the correlation between morbidity and income.

The report states:

> The prevalence of many health problems in the population exhibits a trend by family income. Certain problems such as mental disorders,

> heart disease, bronchitis and emphysema, sight disorders, diabetes, arthritis and rheumatism, hypertension, and hearing disorders are much more prevalent in the lowest-income quintile that in other quintiles. These health problems, for the most part, tend to be more limiting than others .... (Canada Health Survey 1981, p.114).

The relation between morbidity and social class is also noted.

> Indicators of social class such as education and income reflect important differences in health status, not merely in terms of the overall prevalence of problems but, more importantly, with respect to the types of problems resulting in serious consequences. It is clear that people of lower-income groups and with lower levels of education do not enjoy the same levels of health as those Canadians of higher social and economic status. (Canada Health Survey 1981, p.14)

The study documents the major problems associated with severe disability -- back, limb and joint disorders, arthritis and rheumatism, heart disease, mental disorders and hypertension. It shows that low-income people suffer disproportionately from these diseases.

The report also reveals that large numbers of Canadians experience emotional distress. These individuals are concentrated in the following groups: women, teenagers, the elderly, the widowed, divorced and separated, low-income people and those who are inactive for health or other reasons. (Canada Health Survey 1981, p.129). One of the shared characteristics that influenced the lives of these people was inadequate income. Data on health problems by family income is found in Appendix VI.

Two acknowledged sources of pathology are smoking and alcoholism. The Health of Canadians found that smoking was directly related to an individual's occupation and employment status. Daily cigarette smoking is significantly more prevalent among unemployed persons and blue-collar workers than it is among those in managerial and professional occupations.

Problems related to alcohol consumption are a concern equally for poor people and for the affluent. However, poor persons have less opportunity to cope with the problems associated with drinking. They are more vulnerable to the risks associated with alcohol

toxicity -- unemployment, malnutrition and "bottoming out". (Labonte and Penfold 1981, p.16)

There is some evidence that illnesses associated with poverty result in increased health expenditures. This is a major incentive for addressing poverty-related morbidity. In 1976, the Ontario Council of Health published a book entitled An Estimate of the Economic Burden of Ill-Health. The evidence indicates that the social costs of illness are high. The estimated economic burden of direct and indirect costs for ill-health is placed at $2,976,636,993.

Direct costs include:

- personal health care (hospital costs, non-hospital medical care costs, and other costs);
- non-personal public health care costs;
- education; and
- research;

Indirect costs include:

- monetary costs (mortality and morbidity); and
- non-monetary costs (pain and suffering).

A ranking of the diagnostic categories for the indirect burden, mortality and morbidity, indicates that the first six categories of diagnosis make up for 86.8% of the total economic burden. The categories are: cardio-vascular diseases, accidents, cancers, mental, digestive and respiratory ailments. (Ontario Council of Health 1976, p.35) These diseases, according to the Health of Canadians, are most prevalent among lower socio-economic groups.

III. THE SOCIAL ENVIRONMENT OF POOR PEOPLE

A. INTRODUCTION

Research has revealed important relationships between poverty and health. However, numerical data do not explain the social forces that create vulnerability. The conditions associated with low income provide a vital basis for understanding why poor people are particularly subject to health risk. Inadequate living

conditions, poor working conditions, and restricted access to health care impinges upon the achievement of positive health status. These interrelated factors create a social environment which adversely affects the health of poor persons.

B. LIVING CONDITIONS

The range of goods and services available to the low-income consumer is severely restricted by the limited purchasing power of this group. Items which are considered normal expenditures by the non-poor are often beyond the means of those who live on low incomes. The inability to purchase basic goods and services can affect the health status of poor people in a number of ways.

(i) Housing: The Dwelling

Deteriorating housing increases the probability of accidents; inadequate heating, poor sanitation and overcrowding promote the contraction and communication of disease. These conditions of material deprivation can lead to or aggravate depression, anxiety and emotional breakdown. (Special Senate Committee on Poverty 1976, p.124).

Children of low-income families in Toronto are perhaps the most vulnerable to inadequate housing and physical environments. As the report Mortality by Income Level in Urban Canada points out, the major contributors to differential mortality by income level for children between 1 and 14 years of age are accidents, poisonings and violence, with motor vehicle traffic accidents involving pedestrians as victims as the major sub-category in this group (Wigle and Mao 1980, p.20).

Other studies have reported similar findings concerning the effects of neighbourhood environment on the health and safety of children (Cohen 1979, Michelson 1970, Michelson 1977). An environment which is characterized by high traffic densities and a scarcity of park and recreation space is dangerous for children. However, low-income housing is often situated in such neighbourhoods (Harvey 1973, Saarinen 1976).

(ii) The Housing Market

The limited availability of affordable housing for poor persons has direct health consequences because it reduces their chances to obtain adequate living space. There are several indications that

the supply of low-cost shelter in Toronto lags considerably behind the demand for it. In September of 1981 the Metropolitan Toronto Housing Company waiting list for senior citizens housing was 2,258 households (City of Toronto Housing Department 1981, p.11). Between April and July 31, 1982, the Metro Housing Authority waiting list for rent-geared-to-income family housing grew from 5,300 to 6,001 households. (Horgan, Globe and Mail, Sept. 17, 1982). The Commissioners of Housing and Planning and Development have proposed that the City of Toronto become involved in establishing emergency shelters and long-term housing for homeless persons. This intervention is seen as necessary to offset a decline in the numbers of cheap hotels and rooming houses and to accommodate increasing numbers of chronically unemployed and hard-to-house persons (City of Toronto Housing and Planning and Development Departments 1982).

The report Building Challenges states:

> The rental housing market in Toronto now is in dire straits and no relief is in sight. Continuing low vacancy rates, steadily climbing rent levels, combined with marginal increments to the rental stock, save for condominum units being rented out ... at the top of the market, have made for a crisis in affordable rental housing in the City. (City of Toronto Housing Department 1981, p.49).

The deleterious effects of this kind of housing on the physical and mental health of an individual are substantial. High housing costs means that less income is available to meet other basic needs.

(iii) Nutrition

Improper diet affects susceptibility to disease and infection. R.L. Hurley, commenting on the effects of malnutrition on children, said:

> Poor nutrition, whether during the reproductive cycle or after birth, can impair intelligence, sometimes by causing permanent organic damage to the central nervous system (Hurley 1969, pp. 65-66).

It is generally recognized that malnutrition must be severe before lasting organic damage can occur. However, Hurley points out that in the case of poor children, they are more susceptible to

diseases and infections "... because their natural resistance is lowered by inadequate nutrition. The length of recuperation is also measurably increased ..." (Hurley 1969, p.182).

Poor people are unable to comparison shop because income constraints reduce access to transportation. Low-income consumers commonly shop at discount food stores. These outlets often stock items which are slightly damaged, on which the "best before" date has expired or which come from salvage operations. While routine inspections are made and these products are seldom hazardous, their nutritional value is open to question. Goods of this kind have limited appeal to average consumers. However, low-income shoppers are forced to trade off cost savings for food which is frequently beyond its nutritional peak.

In an article on poverty in the Globe and Mail, it was reported that families receiving social assistance frequently have inadequate funds available for food. (Rowan, Globe and Mail, Sept. 24, 1981). Families such as these are highly vulnerable to exploitative credit plans offered by some stores in low-income neighbourhoods. Groceries are advanced to a family when they have no cash. On arrival of their social assistance cheque, they pay for the food, the interest on the loan, and in some cases, the higher price usually placed on items in this kind of "credit" store.

Low birth weight -- weight of less than 2500 grams -- in a specific population can be a good indicator of the nutritional status of a community. If the incidence of low birth weight is high, it indicates poor nutritional status of mothers in that population, and it may also indicate a higher risk of malnutrition in young children. The experience of the Department of Public Health staff in the Downtown Health Area confirms these findings. The "Healthiest Babies Possible Project" was established to respond to the need for improved nutrition for low-income, pregnant women in the City of Toronto. Department of Public Health statistics indicated that in 1981, there were 461 low birth weight babies in the City. This represented 6.1% of the total population of newborn infants.

The achievement of children in school is related to adequate nutrition. The Toronto Star reported that the Toronto Board of Education plans to provide daily nutritional snacks or meals for thousands of children in elementary schools, along with a nutrition education program. In a four-year pilot project in nine inner-city schools, it was found that nutritious meals improved student attentiveness and behaviour. An official of the Board of Education commented:

> Unless we're willing to make nutrition a part of the (school) program, we will have a lot of malnourished kids in our system and malnourished kids don't learn well (Bates Toronto Star, June 24, 1981).

Although malnutrition is not limited to low-income families, it is clear that being poor limits the ability to choose to be better nourished.

(iv) Child Care Services

Parents who have little money for child care services are often forced to leave their children in poorly supervised environments. The document, Mortality by Income Level in Urban Canada, has recognized inadequate daycare as a important factor in the high accident rates among low-income children (Wigle and Mao 1980, p.17).

(v) Social and Recreational Activities

Low-income people have limited access to sports, social, cultural and recreational activities that are available to those with more money. As Labonte and Penfold state:

> There is, for example, an assumption of homogeneity of abilities to choose healthy lifestyles without addressing the "economics" of fitness. All persons should jog (even if jogging outfits and shoes suited to the road surface of inner-city dwellers are expensive), or swim (even if the costs of using directly or indirectly state-funded aquatic facilities are the same for persons earning $100,000 as for welfare recipients), or hike on weekends, (even if large number of people, especially single mothers, have difficulty in affording transportation out of the city), or take up a sport like racquetball (at overcrowded community centres or expensive private clubs) and so on ...
>
> The point here is simply that people do not have equal access to health resources and suffer varying forms of economic, sexual and cultural barriers to undertaking a leisure-time fitness program. A decision to become

> involved in such a program can therefore only be regarded as primarily personal choice when all the constraints facing many people have been either removed or distributed equally to all members of society (Labonte and Penfold 1981, p.18)

(vi) Emotional Health

The emotional and psychological stresses inherent in living in poverty are considerable. Lack of adequate housing, transportation, child care, nutritious food, clothing, and income all take their toll on the mental health of poor people and their families. These stresses have been identified as contributors to violence within the family. David Gil, in his article "Violence Against Children", found that:

- the income of families of abused children was very low and that of families of non-white abused children even lower;
- at the time of the abusive incident, over 37% of the families were receiving public assistance;
- nearly half of the fathers of abused children were not employed throughtout the year;
- nearly 30% of the abused children lived in female-headed households (Gil 1971, pp.637-648).

C. THE OCCUPATIONAL ENVIRONMENT

(i) Working Conditions

A recent study shows that approximately one million family units in urban Canada could be considered working-poor. While some of these individuals work part-time and receive part of their income from social assistance programs, one half of the working poor receive more than 60% of their total income from employment (Muszynski and Krawetz 1981, pp. 2-3).

The relationship of poor persons to the labour market is usually economically precarious and frequently psychologically and physically stressful. The victimization of low-income workers starts early: it begins within the family, continues in the education system, and results in many of the working poor reaching the labour market with limited education and few job skills. Their opportunities include the least desirable jobs performed at low wages, often in hazardous work environments. (Muszynski and Krawetz 1981).

Often individuals may have skills and average-or-better educational qualifications. However, because of discriminatory employment practices, job ghettoization, low market demand or family situations, they are trapped in low-wage work (Muszynski and Reitz 1982).

The working conditions of poor people contribute to their ill health in two ways: (i) poor people are often in physically dangerous work environments; and (ii) job insecurity is a major cause of the high levels of anxiety and tension which characterize life in poverty.

The working poor frequently earn their ill health and shortened lives by working long hours with outdated and dangerous equipment in environments with poor lighting, ventilation and heating. They must endure the hardships of piece work, of oppressive methods of supervision and of unstable employment conditions (Lorrain 1981: Johnson and Johnson 1982, pp. 67-83).

Occupational Health and Safety legislation does not provide adequate protection for many low-income workers. Significant segments of the low-wage sector, such as industrial home-workers, domestics and office and clerical workers are not covered under Bill 70, Ontario's Health and Safety Act. Yet office workers, as one of the major excluded groups, are increasingly exposed to a new spectrum of health-related risks. In the Third Annual Report of the Ontario Advisory Council on Occupational Health and Occupational Safety, the Office and Professional Employees International Union states:

> The introduction of xerox copy machines, video display terminals and teletype machines ... expose operators to new hazards affecting their mental and physical well-being. Recent and ongoing research is exposing health problems that never occurred before or were never properly diagnosed. (Advisory Council on Occupational Health and Occupational Safety 1981, p.255).

Appendix VII provides a chart which describes the health hazards of office work. Appendix VIII contains excerpts from Ontario's Occupational Health and Safety legislation.

Even workers who are covered by Bill 70 report difficulties and frustration with the implementation of mandatory health and safety committees. Unions and management have tended to approach health and safety from different vantage points. Consequently, they have had difficulty agreeing on the role of committees, the frequency of health inspections and the manner of collecting and retaining data on work hazards and injuries (Advisory Council on Occupational Health and Occupational Safety 1981).

The need for rigorous enforcement of occupational health and safety provisions is evident. In 1980, 444,674 work-related injuries were reported to the Ontario Workmen's Compensation Board. Of these, 165,221 were financially compensated injuries because they resulted in a temporary or permanent disability which lasted a day or more (Holden 1981).

Harold Luft found that in the United States, the probability of an adult in a low-income family (annual income under $4,000.00) becoming disabled in a given year is twice that of one in a family with an income of $8,000.00 or more. He found "... substantial relationships between poor education, low income, and certain job characteristics on the one hand, and higher incidence rates of disability on the other." (Luft 1978).

The impact of disability, in terms of altered labour force participation and decreased income, is much greater on the poor worker than on the non-poor worker. The lower levels of education and lack of skills of poor workers confines them to a very limited role within the labour market. This group has neither the mobility nor the flexibility of more highly educated and skilled non-poor workers. The latter are more able to adjust their job function to accommodate the limitations imposed by a disability, or to find new, equally remunerative jobs which are not affected by the disabling condition. There is a high probability that the labour force participation of poor disabled workers will be negatively affected in any of the following ways:

- they will be forced to accept an altered job function at lower wages;
- they will work fewer hours;
- they will work fewer days per year;

- they will be forced to leave the labour force entirely (Luft 1978).

Within the labour market, poor workers function to provide a source of cheap labour to fill the unskilled jobs in the marginal sector of the economy. This role not only confers low social and economic status, it can jeopardize health through exposure to high psychological and occupational risks.

(ii) Unemployment

A recent examination of unemployment in Ontario and Metropolitan Toronto states:

> Ontario's real level of unemployment is 705,000 and the real unemployment rate in Ontario is 14.8 percent. When discouraged workers and underemployed workers are added to the numbers of the official jobless in Toronto, the real level of unemployment is 257,000 and the real rate of unemployment becomes 13.7 percent of the labour force (Muszynski 1982, p.3).

This situation represents not only a crisis in the economy, but also has serious implications for the health of unemployed individuals and their families. Research investigating the health of the unemployed links unemployment with a variety of psycho-social health problems.

In the United States, Harvey Brenner has investigated the pathological effects of unemployment and general economic distress (Brenner 1976). His work illustrates the relationship between economic policy, particularly as it affects rates of unemployment, and health status. He has demonstrated that an increase in several stress indicators such as suicide, mental hospital admissions, prison admissions, homicides and mortality due to cirrhosis of the liver and heart disease can be attributed to an increase in unemployment.

While there continues to be debate about Dr. Brenner's method for calculating the costs of economic stress factors, his research is a sophisticated attempt to address the problem of pathology and the economy (Adams 1981: Eyer 1977: Cohen and Felson 1979). Leon Muszynski highlighted this point in an article in CUPE Facts:

> Brenner's studies were .... used by the Joint Economic Committee of the United States to estimate how much increased illness due to unemployment cost the U.S. in

actual dollars. The results were startling. They found that a 1.4% rise in unemployment sustained over a period from 1970 to 1974 resulted in 1,540 more deaths due to suicide, 1,740 homicides, 870 deaths due to cirrhosis of the liver, and 26,440 deaths due to various diseases of the heart such as strokes and heart attacks. Total mortality was estimated to be as high as 51,520. It was also found that there was an increase in mental institution admissions of 5,520 persons, and 7,660 admissions to prisons, as a direct result of the rise in unemployment. These figures represented only those things that were measurable. The extent of illness without death, or mental breakdown without institutionalization does not show up here. The human tragedy alone is shocking enough but congressional economists went on to attach specific monetary costs to the actual toll in human lives.

In calculating these costs, economists looked at income lost due to joblessness as well as the cost of hospitalization, prisons, other institutions and services. It was found that a 1.4% rise in unemployment over five years had direct costs of 63 million due to suicides, 82 million for mental institutionalization, 210 million for prisons, 434 million for homicides, and 1.4 billion for heart disease deaths. The total bill for the extra 1.4% unemployment was estimated to be 6.6 billion dollars. When one ponders the amount of productive work this money would have supported if it had been spent on job creation, the irony of the tragedy becomes apparent (Brenner in Muszynski 1978, pp.95-97).

As the most vulnerable segment of the labour force, the working poor bear a disproportionate share of the health costs imposed by unemployment and economic insecurity.

D. THE HEALTH CARE SYSTEM

For many poor people, bouts of ill health and the persistence of chronic illness are common occurrences. However, symptoms of illness which would receive early recognition by higher socio-economic groups, and for which they would seek immediate medical attention, often are not acknowledged by poor people until they reach a greater degree of severity or become incapacitating. Poor people cannot afford to recognize symptoms of illness and to respond with appropriate preventive or curative behaviours. A single mother on welfare with a feverish child in the middle of the night is faced with a trade-off: either taking a cab to a hospital emergency department and going without milk the next week, or staying home, saving the milk money and not receiving adequate medical attention for the child.

For the working poor, the situation is similar. They hold little power in the labour market, they are often subject to arbitrary dismissal, and their employment arrangements are not enhanced by benefit packages. Thus, absenteeism due to medical appointments or due to recuperation from illness can result in the loss of employment and will almost certainly result in the loss of wages. It has been pointed out that "persons in higher paying jobs are more likely to have sick leave benefits, formal or informal, and "... are less likely to lose any income as a result of illness" (Lefcowitz 1976, p.54). The economic security enjoyed by the non-poor enables this group to develop a sensitivity to the symptoms of illness which cannot be achieved by those who live in poverty.

There is no doubt that the utilization of services by low-income individuals has increased under national health insurance schemes in Canada (Begin 1978). However, utilization rates are not synonymous with good or appropriate care. As one author stated, "improved access to care has led to increased utilization among the poor because illness and injury are more frequent among them." (Challenor 1982, p.11).

Middle and upper-income individuals have a greater awareness of the availability of health care services and are more discriminating in their use of them. They are less intimidated by health care professionals, are more likely to assert themselves in a treatment situation, and are more able to push for a comprehensive explanation of the nature of an illness.

Poor people are often unaware of the array of services available. When confronted by an imposing health care setting staffed largely by middle and upper class professionals whose language, diagnoses and treatment procedures may be unfamiliar and threatening, they

often withdraw and curtail contact with physicans and hospitals. (Carter and Peel 1976).

The approach of poor persons to medical care is often on an emergency basis. They seldom have a regular physician, and seek health care sporadically in outpatient clinics or emergency departments of hospitals.

Bernard Challenor in his article, "Poverty and Health", concluded:

> Such care is more likely to be episodic, fragmented and lacking in continuity ... The quality of such care can often be seriously questioned ... While differences in health utilization patterns among income groups have narrowed from what they were, considerable differences in actual health status between income groups continue to exist, and there is no clear evidence that the quality of care received is equal (Challenor 1982, p.11).

Access to medical and other health services by low-income people is influenced negatively when user charges are imposed. Robin Badgley and David Smith, in their analysis of OHIP data, state:

> ... the general conclusions about the impact of user charges on fee payment differences remain the same. When additional charges were involved, whatever their nature, the volume of services provided decreased and the groups who were most affected were the poor, in this instance, public assistance beneficiaries and the elderly (Badgley and Smith 1979, p.194).

In Ontario, the percentage of "opted-out" doctors has reached 15.5% (National Council of Welfare 1982, p.26). A recent study of extra billing in Ontario showed that patients who were extra billed were more likely to reduce or delay the use of medical services. This deterrent effect was stronger for low-income people (National Council of Welfare 1982,p.3).

In Ontario, health premiums represent an additional barrier to the access of low-income people to the health care system. The National Council of Welfare states:

> Whatever the reason -- lack of knowledge about the premium assistance system, unwillingness to undergo the stigmatizing income test and bureauratic red tape involved in applying for

> reduced rates -- it is clear that many low income citizens are paying higher premiums than the law requires. (National Council of Welfare 1982, p.41).

The Council also points out that "because the subsidy income limits are set so low and fail to adjust for family size, the head of a poor household can ...(be) ... in the absurd situation of paying the same monthly premium as a millionaire." (National Council of Welfare 1982, p.41).

IV. POVERTY AND HEALTH: RELEVANCE TO TORONTO

It is difficult to measure precisely the effects that poverty is having on Toronto residents. The City Department of Public Health has birth data by census tract. It also has mortality and morbidity data for some infectious diseases. While these data are at least as good as most jurisdictions, they have marked limitations. Death certificate information is not fully reliable, particularly regarding diagnosis, and infectious diseases are substantially under-reported.

The Department of Public Health has been planning for some time to implement the Canada Health Survey on a probability sample of Toronto residents. This project has been delayed by recruitment difficulties and financial constraints. Such a survey would provide much better morbidity data than is now available.

Professor Murdie of York University has classified census tracts in Metro Toronto on the basis of a number of socio-economic indicators derived from census data. This is based on the 1976 census and needs to be updated. It is possible to link deaths to census tracts at various socio-economic levels, but the socio-economic status of each deceased individual can not be inferred from these data. This may lead to false conclusions known as the ecological fallacy.

Data limitations make it difficult to statistically demonstrate the linkages between poverty and health that have been found in other jurisdictions. However, the existence of poverty in Toronto is an undeniable reality. This suggests that a significant number of City residents may be particularly vulnerable to health risks.

Estimates based on data derived from the recent survey, Resident Attitudes Toward City Services, suggests that 20% of Toronto households are below the Statistics Canada Poverty Line (City of Toronto Planning and Development Department 1982).

Other research shows that a significant proportion of Ontario's social assistance beneficiaries live in Metropolitan Toronto. In 1980, about 27% of the Province's welfare recipients, (102,547 persons) were residents of Metropolitan Toronto (Miller et al 1981, pp.34,52). Many of these individuals lived in the City of Toronto.

Although the precise number of working-poor individuals and families in Toronto cannot be determined due to data limitations, it is fair to say that Toronto is not unique among urban centres. A recent study shows that approximately one million family units in urban Canada could be considered working-poor. Of these family units, 35% lived in urban Ontario. (Muszynski and Krawetz 1981, pp.23, 24).

A recent Toronto Board of Health report examined the difficulties being experienced by de-institutionalized adults. In addition to the problem of inadequate supportive services for this group, the study found that low income was a serious problem. Over half of the patients discharged at two psychiatric facilities studied during a survey depended upon General Welfare Assistance, Family Benefits or disability allowances for their income. The report noted that since the maximum allowable benefit for single unemployable persons on General Welfare Assistance is $288 per month, and the maximum allowance for a single disabled person on family benefits is $364 per month, it is fair to say that half the psychiatric patients discharged during the survey had an income below the poverty line (Local Board of Health, Report No. 10, 1982, p.10). There are about 7,000 pyschiatric discharges every six months in Metropolitan Toronto alone. (Marshall 1982).

The children of low-income families are a particularly vulnerable group. According to a forthcoming report, the City of Toronto has a higher proportion of children in families receiving social assistance than other area municipalities. In 1978, 8% of the City's children had parents who received Family benefits compared to 4.3% of children in Metropolitan Toronto as a whole. Similarly, 4.3% of children in Toronto were dependents of General Welfare Assistance recipients in 1979 compared to 3.1% for all of Metropolitan Toronto. (City of Toronto Planning and Development Department 1982). In a statement prepared by clergymen protesting the extent of poverty in Metropolitan Toronto, it was estimated that children represented 40,000 out of the 400,000 poor persons living in the Metropolitan area. (Toronto Star, June 9, 1982).

Elderly persons are a significant segment of Toronto's population. According to the latest data available, 12.5% of City residents are 65 years of age or older. (Statistics Canada, 1981 Census). While the precise number of elderly Torontonians that live in

poverty is unknown, numerous reports have documented the poverty of the elderly. Statistics Canada estimated for 1977 that 50% of individuals aged 65 to 69 and 63% of individuals 70 years and over were living in poverty. Not only are single old people poor, but a significant number of families headed by elderly persons are poor. The data show that 16% of those with the head of the family aged 65 to 69, and 22% of those with the family head over 70 years, were poor. (Common Front for Pension Reform, 1979). Over half, 55% of people over 65, had incomes low enough that they had to be supplemented by the income tested supplement, the Guaranteed Income Supplement. (Social Planning Council of Metropolitan Toronto 1979, p.10).

A life in poverty is the daily experience of a wide spectrum of Torontonians in all age groups. There is little doubt that many experience devastating health impacts as a result of their condition of disadvantage. The precise nature and magnitude of these impacts remains to be calculated. A chart illustrating the conditions inherent in a life of poverty and the possible health outcomes is presented in Appendix IX.

V. CONCLUSIONS

Health is a determining environmental factor influencing the lives of individuals and groups. Health is also determined by socio-environmental factors such as level of income, living conditions, working conditions and access to health care services. Being healthy as an individual or as a society is a dynamic process related to the complex interactions of social, economic, political and physical-environmental systems. However, until these complex interactions are better understood and their negative impacts identified and addressed through policies and programs, the health of poor people will remain significantly below that of the rest of the population.

To meet this challenge it will be necessary to reformulate social problems like poverty and health. Too frequently, problem-solving approaches blame the victim by relating a crisis situation to the failure of the individual or group. For example:

- poverty among the elderly is linked to the individual's failure to save for the future instead of a lack of societal commitment to provide adequate retirement income;

- malnutrition in children is linked to inadequate meal preparation by the mother instead of inflationary food prices, or exploitative business practices;

- unemployment of disabled people is seen to result from their inability to compete rather than from a job market that is not adapted to the capabilities of the handicapped;

- high accident rates among ethnic minority children is linked to the poor supervisory habits of parents rather than to geographic location in congested neighbourhoods with high traffic densities;

- mental illness among immigrant women is related to their inability to "adjust" rather than to their work and family situations;

- a low-income person who dies prematurely is blamed for living an unhealthy lifestyle while little attention is directed toward the neighbourhood environment;

- the fact that 50% of Canadians don't make annual visits to the dentist is seen as a matter of personal preference rather than the absence of comprehensive dental plans.

In this report it has been argued that, in large measure, the vulnerability of poor people to health risks is related to conditions in the social environment. These conditions impose high health costs upon individuals and the community. Altering these conditions requires considerable effort across professional disciplines and in the various sectors inside and outside government. At the municipal level, research, planning, public education, advocacy and program delivery are the key instruments to effect change. These tools, used with a clearer understanding of the impact of poverty on the health of Torontonians, can play a vital role in the change process.

VI. RECOMMENDATIONS

1. That the Local Board of Health reaffirm the importance of collecting comprehensive data through a community health survey that will permit an assessment of the health status of all residents of the City of Toronto.

2. That the Medical Officer of Health study the health status of low-income residents of Toronto. This study should identify and investigate the effects of poverty-related factors on the health status of specific target populations including: elderly persons; the unemployed; social assistance recipients; children; deinstitutionalized adults; disabled persons; new immigrants; and racial and ethnic minorities.

3. That the Medical Officer of Health report on current programs and future plans for serving the health needs of low-income Torontonians, with a view to preventing the following conditions: inadequate nutrition; inadequate housing; environmental hazards; family violence, unemployment-related morbidity; occupational health risks; and inadequate access to health and social services.

4. That the Medical Officer of Health continue to develop a socio-environmental approach to health within the Department of Public Health.

5. That the Commissioner of Planning and Development work with appropriate agencies to develop a comprehensive data base which can be utilized by public health, social planning, human services, recreation and education agencies to determine the socio-economic characteristics and needs of agency client groups in the City of Toronto.

6. That the Local Board of Health recommend that City Council accept in principle the need to study the health, social and economic costs of poverty, unemployment and inadequate social assistance payments to the City of Toronto, and request the Medical Officer of Health to report on the resources required to undertake such a study.

APPENDICES

I. Statistics Canada Low-Income Cut-Offs for 1980.

II. Share of Total Income, By Income Quintile - 1951 and 1980.

III. Comparison of Statistics Canada, CCSD and Senate Committee Poverty Lines, 1982 Estimates.

IV. Rank Order of Causes of Death Contributing to Mortality Differential Between Persons in High and Low Income Levels.

V. Life Expectancy By Sex, Age and Income Level.

VI. Prevalence of Health Problems by Economic Family Income by Type of Health Problem, Canada, 1978-79.

VII. Health Hazards of Office Work.

VIII. 1978 Occupational Health and Safety Act: Selected Sections.

IX. Poverty and Health: A Chart of Relationships.

APPENDIX I

STATISTICS CANADA LOW-INCOME CUT-OFFS FOR 1980

Family Size	Size of Area of Residence				
	500,000 and over	100,000-499,999	30,000-99,999	less than 30,000	Rural
1	$ 5,822	$ 5,450	$ 5,293	$ 4,868	$ 4,231
2	8,438	7,902	7,674	7,057	6,140
3	10,767	10,085	9,788	9,008	7,833
4	12,807	11,992	11,640	10,711	9,312
5	14,316	13,402	13,014	11,976	10,413
6	15,716	14,714	14,287	13,145	11,428
7 or more	17,232	16,130	15,664	14,409	12,530

Source: National Council of Welfare
Poverty in Canada 1980: Preliminary Statistics 1982

APPENDIX II

SHARE OF TOTAL INCOME, BY INCOME QUINTILE
1951 AND 1980

	Families		Single Persons	
	1951	1980	1951	1980
Lowest quintile	6.1%	5.9%	2.7%	4.1%
Second quintile	12.9	12.9	8.9	9.2
Middle quintile	17.4	18.5	16.1	15.4
Fourth quintile	22.4	24.3	25.8	25.8
Highest quintile	41.1	38.5	46.6	45.5
Total	100.0	100.0	100.0	100.0

"Quintile" means fifth; total income is divided into five equal groups.

Source: National Council of Welfare
Poverty in Canada 1980 Preliminary Statistics 1982

APPENDIX III

COMPARISON OF STATISTICS CANADA, CCSD AND SENATE COMMITTEE POVERTY LINES, 1982 ESTIMATES

Family Size	Statistics Canada Range	Statistics Canada Mid-range	CCSD	Senate Committee
1	$ 5,307 - 7,303	$ 6,640	$ 6,857	$ 7,680
2	7,702 - 10,585	9,626	11,429	12,800
3	9,825 - 13,506	12,278	13,714	15,360
4	11,681 - 16,065	14,601	16,000	17,920
5	13,062 - 17,958	16,325	18,286	20,480
6	14,336 - 19,714	17,921	20,571	23,040
7 or more	15,717 - 21,615	19,649	22,857	25,600

Source: National Council of Welfare
Measuring Poverty: 1982 Poverty Lines. 1982, p.4

APPENDIX IV

RANK ORDER OF CAUSES OF DEATH CONTRIBUTING TO MORTALITY DIFFERENTIAL BETWEEN PERSONS IN HIGH AND LOW INCOME LEVELS

Ages	Males					Females				
	Cause of Death	ASMRs by Income Level		Diff.	% of Diff.	Cause of Death	ASMRs by Income Level		Diff.	% of Diff.
		High	Low				High	Low		
Age < 1	All causes	1234.0	2407.0	1173.0	100	All Causes	987.0	1842.0	855.0	100
	Certain Causes of Perinatal Morbidity and Mortality	644.0	1346.0	701.0	60	Certain Causes of Perinatal Morbidity and Mortality	551.0	936.0	384.0	45
	Congenital Anomalies	307.0	499.0	192.0	16	Diseases of the Respiratory System	58.0	216.0	158.0	18
	Diseases of the Respiratory System	72.0	180.0	108.0	9	Congenital Anomalies	258.0	381.0	124.0	15
	Other Causes	211.0	382.0	172.0	15	Other Causes	120.0	309.0	189.0	22
1-14	All Causes	32.0	62.0	30.0	100	All Causes	30.0	45.0	15.0	100
	Accidents, Poisonings and Violence	16.0	33.0	17.0	57	Accidents, Poisonings and Violence	10.0	16.0	5.6	37
	Neoplasms	5.9	9.6	3.7	12	Neoplasms	7.1	12.0	5.2	35
	Diseases of the Respiratory System	2.2	5.3	3.1	10	Congenital Anomalies	3.5	6.3	2.8	19
	Other Causes	7.9	14.0	6.2	21	Other Causes	9.4	11.0	1.4	9
15-34	All Causes	99.0	148.0	49.0	100	All Causes	44.0	67.0	23.0	100
	Accidents, Poisonings and Violence	74.0	106.0	32.0	65	Accidents, Poisonings and Violence	24.0	34.0	10.0	43
	Diseases of the Nervous System	3.0	6.7	3.7	8	Diseases of the Respiratory System	1.3	4.3	3.0	13
	Neoplasms	9.5	12.8	3.3	7	Endocrine, Nutritional and Metabolic Diseases	0.2	2.3	2.1	9
	Other Causes	13.0	23.0	10.0	20	Other Causes	19.0	26.0	8.0	34
35-64	All Causes	634.0	1225.0	591.0	100	All Causes	358.0	542.0	184.0	100
	Diseases of the Circulatory System	326.0	527.0	201.0	34	Diseases of the Circulatory System	98.0	172.0	74.0	40
	Neoplasms	167.0	267.0	100.0	17	Accidents, Poisonings and Violence	35.0	60.0	25.0	14
	Accidents, Poisonings and Violence	65.0	163.0	98.0	17	Neoplasms	170.0	192.0	22.0	12
	Diseases of the Digestive System	26.0	91.0	65.0	11	Diseases of the Digestive System	17.0	38.0	21.0	11
	Diseases of the Respiratory System	15.0	74.0	59.0	10	Endocrine, Nutritional and Metabolic Diseases	3.5	17.0	13.0	7
	Other Causes	35.0	103.0	68.0	12	Other Causes	35.0	63.0	29.0	16
65+	All Causes	5832.0	7380.0	1548.0	100	All Causes	3585.0	3781.0	196.0	100
	Diseases of the Circulatory System	3386.0	4107.0	721.0	47	Diseases of the Circulatory System	2216.0	2319.0	103.0	53
	Neoplasms	1308.0	1579.0	271.0	18	Diseases of the Digestive System	98.0	134.0	36.0	18
	Diseases of the Respiratory System	425.0	681.0	256.0	17	Endocrine, Nutritional and Metabolic Diseases	101.0	125.0	24.0	12
	Diseases of the Digestive System	187.0	297.0	110.0	7	Diseases of the Genitourinary System	29.0	46.0	17.0	9
	Accidents, Poisonings and Violence	131.0	206.0	75.0	5	Accidents, Poisonings and Violence	109.0	118.0	9.0	5
	Other Causes	395.0	510.0	115.0	7	Other Causes	1032.0	1039.0	7.0	4
All Ages	All causes	720.0	1067.0	347.0	100	All Causes	435.0	532.0	97.0	100
	Diseases of the Circulatory System	371.0	492.0	120.0	35	Diseases of the Circulatory System	209.0	239.0	30.0	31
	Neoplasms	160.0	214.0	54.0	16	Accidents, Poisonings and Violence	31.0	45.0	14.0	14
	Accidents, Poisonings and Violence	59.0	111.0	52.0	15	Diseases of the Digestive System	14.0	24.0	10.0	10
	Diseases of the Respiratory System	41.0	83.0	42.0	12	Neoplasms	118.0	126.0	8.0	8
	Diseases of the Digestive System	24.0	52.0	28.0	8	Diseases of the Respiratory System	19.0	27.0	8.0	8
	Other Causes	65.0	115.0	51.0	15	Other Causes	44.0	71.0	27.0	28

ASMR - refers to age standardized mortality rate
Diff.- difference (ASMR for low income level minus ASMR for high income level).

Source: D.T. Wigle and Y. Mao. Mortality by Income Level in Urban Canada. Health and Welfare Canada, 1980, p.21

APPENDIX V

LIFE EXPECTANCY BY SEX, AGE AND INCOME LEVEL

Sex	Income Level					Total
	(High) 1	2	3	4	(Low) 5	
Males						
< 1	72.47	71.14	70.05	69.24	66.33	69.95
1-4	72.32	71.15	70.24	69.56	66.84	70.09
5-9	68.46	67.36	66.41	65.76	63.05	66.27
10-14	63.56	62.49	61.54	60.93	58.28	61.41
15-19	58.63	57.59	56.64	56.09	53.38	56.51
20-24	53.87	52.86	51.97	51.40	48.69	51.79
25-29	49.17	48.15	47.31	46.71	44.04	47.11
30-34	44.36	43.39	42.58	41.96	39.38	42.37
35-39	39.60	38.64	37.85	37.26	34.69	37.64
40-44	34.85	33.92	33.17	32.65	30.23	32.98
45-49	30.22	29.36	28.66	28.28	26.02	28.48
50-54	25.74	25.00	24.42	24.06	22.05	24.20
55-59	21.50	20.88	20.41	20.14	18.54	20.20
60-64	17.59	17.10	16.66	16.57	15.29	16.53
65-69	14.09	13.63	13.40	13.29	12.33	13.25
70-74	10.91	10.58	10.46	10.34	9.72	10.33
75-79	7.91	7.78	7.80	7.69	7.44	7.69
80-84	5.30	5.31	5.19	5.12	5.09	5.19
85+	6.54	6.73	5.99	6.03	5.79	6.16
Females						
< 1	77.45	77.00	76.60	75.63	74.62	76.36
1-4	77.17	76.84	76.49	75.66	74.93	76.28
5-9	73.31	73.00	72.63	71.85	71.12	72.45
10-14	68.41	68.09	67.75	66.98	66.26	67.56
15-19	63.48	63.16	62.83	62.06	61.37	62.64
20-24	58.59	58.27	58.00	57.21	56.51	57.77
25-29	53.70	53.38	53.14	52.33	51.63	52.89
30-34	48.81	48.51	48.26	47.49	46.82	48.03
35-39	43.96	43.70	43.41	42.71	42.09	43.21
40-44	39.16	38.87	38.61	38.01	37.43	38.44
45-49	34.44	34.23	33.90	33.42	32.98	33.80
50-54	29.83	29.67	29.30	28.94	28.72	29.28
55-59	25.34	25.23	24.94	24.66	24.47	24.90
60-64	21.09	20.92	20.72	20.55	20.41	20.71
65-69	16.97	16.95	16.68	16.56	16.53	16.72
70-74	13.14	13.09	12.89	12.84	12.82	12.94
75-79	9.52	9.47	9.32	9.30	9.33	9.38
80-84	6.01	6.03	5.96	5.90	5.99	5.98
85+	8.14	8.90	7.65	8.01	8.64	8.27

Source: D.T. Wigle and Y. Mao. Mortality by Income Level In Urban Canada. Health and Welfare Canada, 1980, p.27

APPENDIX VI

PREVALENCE OF HEALTH PROBLEMS BY ECONOMIC FAMILY INCOME, BY TYPE OF HEALTH PROBLEM, CANADA, 1978-79

Type of health problem		Total	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile	Income unknown
		in thousands						
Total population(2)	No.	23,023	4,335	4,334	4,335	4,335	4,333	1,349
	%	100.0	18.8	18.8	18.8	18.8	18.8	5.9
At least one problem	No	12,510	2,543	2,265	2,196	2,367	2,532	807
	%	100.0	20.3	18.1	17.6	18.9	20.2	6.4
No problem	No	10,513	1,792	2,069	2,140	1,968	1,800	742
	%	100.0	17.0	19.7	20.4	18.7	17.2	7.1
Health problems								
Total problems	No.	25,528	6,079	4,584	4,336	4,519	4,939	1,070
	%	100.0	23.8	18.0	17.0	17.7	19.3	4.2
Mental disorders	No	1,000	333	184	139	134	150	61
	%	100.0	33.3	18.4	13.9	13.4	15.0	6.1
Diabetes	No	379	104	79	56	57	72	–
	%	100.0	27.4	21.0	14.7	15.0	19.1	–
Thyroid disorders	No	297	68	54	48	48	60	20
	%	100.0	22.9	18.2	16.1	16.1	20.1	6.8
Anemia	No	417	104	88	87	74	63	22
	%	100.0	24.8	21.0	16.0	17.8	15.2	5.2
Headache	No	1,102	230	184	218	202	219	49
	%	100.0	20.9	16.7	19.8	18.3	19.9	4.4
Sight disorders	No	1,200	365	218	182	190	207	38
	%	100.0	30.4	18.2	15.2	15.9	17.2	3.1
Hearing disorders	No	1,028	270	171	203	186	172	45
	%	100.0	26.3	16.7	19.8	18.2	16.8	4.3
Hypertension	No	1,551	414	271	246	239	295	86
	%	100.0	26.7	17.5	15.9	15.4	19.0	5.5
Heart disease	No	847	279	155	135	118	136	24
	%	100.0	33.0	18.3	16.0	13.9	16.0	2.9
Acute respiratory	No	781	164	159	164	117	131	46
	%	100.0	21.0	20.4	21.1	15.0	16.7	5.9
Influenza	No	680	180	107	127	125	109	32
	%	100.0	26.5	15.8	18.6	18.3	16.1	4.7
Bronchitis and emphysema	No	562	172	83	95	91	88	23
	%	100.0	30.6	16.5	16.9	16.2	15.6	4.1
Asthma	No	547	142	115	79	88	93	20
	%	100.0	25.9	21.0	14.4	16.0	17.0	3.6
Hay fever and other allergies	No	2,157	312	313	361	469	600	103
	%	100.0	14.5	14.5	16.7	21.7	27.8	4.8
Dental problems	No	1,897	413	327	317	283	294	63
	%	100.0	21.3	19.3	16.7	14.7	17.3	3.7
Gastric and duodenal ulcers	No	482	119	70	90	94	86	23
	%	100.0	24.7	14.5	18.6	19.6	17.8	4.8
Digestive disorders	No	887	160	123	113	102	157	–
	%	100.0	26.2	17.9	16.5	14.8	22.9	–
Skin disorders	No	2,084	351	374	332	481	488	79
	%	100.0	17.0	18.1	16.1	22.3	22.7	3.8
Arthritis and rheumatism	No	2,440	663	412	397	425	443	100
	%	100.0	27.2	16.9	16.3	17.4	18.1	4.1
Limb and joint disorders	No	2,334	512	409	385	411	494	123
	%	100.0	21.9	17.5	16.5	17.6	21.1	5.3
Trauma	No	618	94	118	124	120	125	39
	%	100.0	15.3	19.8	20.2	21.6	20.2	6.3
Other	No	2,858	910	582	458	482	468	87
	%	100.0	32.9	20.8	17.2	18.1	17.6	3.3

(1) "Prevalence" refers to existing conditions reported at the time of the interview and therefore includes both acute and chronic conditions.
(2) The top portion of the table shows the proportion of the population experiencing health problems while the bottom shows the number of health problems reported, classified by type of problem.

Source: Canada Health Survey. The Health of Canadians. National Health and Welfare 1981, p.117

Health Hazards of Office Work

Hazard	Where Found	Effect
Stress	Demanding, repetitive jobs, requiring close attention to detail, lack of job satisfaction, discrimination, sexual harassment, the double day.	Anger, frustration, under-mining of self-worth, fatigue, reduced appetite, chest pain, ulcers, rashes, headaches, high blood pressure, heart disease.
Physical Hazards		
Noise	Print rooms, open area offices, keypunch rooms.	At high levels can cause noise deafness; at lower levels, annoyance and interference with work, and stress.
Lighting	Lighting too bright, producing glare; too dull; not adjustable.	Eyestrain, sore or swollen eyes, blurring, headaches, fatigue, stress.
	Cathode Ray Terminals	As above, due to constant strain on the eyes.
Air Conditioning	Improperly regulated temperatures, stale or improperly returned air.	Fatigue, colds, dry skin, general discomfort.
	Contaminants such as bacteria, and spores.	Contaminants may cause allergic reactions or disease.
Non-Ionizing Radiation	Photocopiers, Cathode Ray Terminals.	Temporary eye damage; long term effects not known although have been linked to cataracts.
Toxic Substances		
Asbestos	Most office buildings of late 1950s and 1960s.	Can cause lung cancer, mesothelioma, stomach and laryngeal cancer.
Cigarette Smoke	Poorly ventilated offices, second-hand smoke.	Irritant and can cause cancer.
Ozone	Around copying machines, produced from oxygen by electrical discharge in air.	Throat and nose irritation, cough, headache, breathing difficulties, chest pain, drowsiness.
Methanol and Ammonia	Duplicating machines	Irritating to eyes, nose and throat.
Organic Solvents Benzene, Toluene and others	Rubber cement and some cleaners, stencil fluid, copy machine toner, liquid erasers.	Can cause drunken feeling, drowsiness may cause liver damage. Benzene can cause leukemia, anemia, other blood disorders and *should not be used*.
Ergonomics		
Muscle Strain	Writing, typing, sitting or standing for long periods of time.	"Writer's cramp", tenosynovitis (inflammation of the tendons of the wrist), low back pain from sitting in poorly designed chairs.
Excessive Sitting or Standing		Varicose veins, stress on the circulatory system, lower back pain.
Safety	Slippery floors, obstructed passages, improperly secured equipment, poorly designed work flow.	Slips, falls, bruises, scrapes, cuts, strains and sprains.

Source: Andrea Hricko and Melanie Brunt. Working for your Life, Labour Occupational Health Progarm and Public citizens' Health Research Group. Berkely, 1976. Hea ne Stellman, Women's Work, women's Health, Pantheon Books, New York, 1977, as quoted in Ontario Advisory Council on Occupational Health and Occupational Safety. Third Annual Report, 1981, pp.258-259

APPENDIX VIII

1978 OCCUPATIONAL HEALTH AND SAFETY ACT: SELECTED SECTIONS

The Act states in section 3(2.3) and in section 7(9) the following:

> This Act does not apply to work performed by the owner or occupant or a servant of the owner or occupant to, in or about a private residence or the lands and appurtenances used in connection therewith. ... this Act or a part thereof does not apply to farming operations ... this Act or a part thereof does not apply to:
>
> a) a person who is employed as a teacher as defined in The Education Act, 1974: or;
>
> b) a person who is employed as a member or teaching assistant of the academic staff of a university or a related institution.
>
> ... this section does not apply,
>
> a) to a constructor or an employer who undertakes to perform work or supply services on a project or;
>
> b) to an employer in respect of those workers who work:
>
> i) in that part or those parts of a building used for office purposes;
>
> ii) in a shop where goods or services are sold or offered for sale to the public, except any part used as a factory;
>
> iii) in a building used for multiple residential accommodation;
>
> iv) in a library, museum or art gallery;
>
> v) in a restaurant, hotel, motel, or premises for which a licence or permit has been issued under the

Liquor Licence Act 1975 except that part used as a kitchen or laundry;

vi) in a theatre or place of public entertainment or:

vii) in premises occupied and used by a fraternal or social orgnization or a private club.

Government of Ontario, The Occupational Health and Safety Act, 1978 and Regulations for Industrial Establishments. Also see the Health and Safety Newsletter of the Labour Council of Metropolitan Toronto, Health Alert, November 1976; January 1977; January 1979 for an analysis of the limitations of the Occupational Health and Safety Act.

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APPENDIX IX

POVERTY AND HEALTH: A CHART OF RELATIONSHIPS

Inadequate Housing

Conditions of Poverty	Health Outcomes
. Poor housing quality	. Accidents
. Poor cooking/bathing facilities	. Restricts practice of positive health behaviours
. Poor heating	. Illness creating, e.g., lead poisoning, rat bite, asthma, carbon monoxide poisoning, tuberculosis, upper respiratory infections, pneumonia and influenza, mumps, whooping cough and accidents and injuries.
. Overcrowding	
. Poor sanitation	

Neighbourhood Risk

Conditions of Poverty	Health Outcomes
. High traffic densities	. High traffic accident rates for children
. Scarcity of park and recreation space	. Stress due to inadequate passive and active recreation
. High levels of vehicular and industrial pollution	. Illness creating
. High levels of violence against persons and poverty	. High levels of anxiety
	. Personal injury

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Deficiencies in Basic Goods and Services

Conditions of Poverty	Health Outcomes
• Inadequate amount of food	• Negative effects on cognitive development.
• Low income	• Psychological stress
• Inadequate clothing	• Higher susceptibility to illness
• Lack of transportation	• Inability to utilize community health services
• Lack of child care services	• High accident rates among children
• Lack of dental care	• Poor dental health

Limits On Cognitive and Social Development

Conditions of Poverty	Health Outcomes
• Parents' low levels of education	• Slow developmental learning in children due to environmental deprivation
• Economic constraints	• Cognitive underdevelopment
• Large family size	• Stunting of social and intellectual potential
• Unstimulating early childhood environment	
• Segregation from broader society	

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Sense of Powerlessness

Conditions of Poverty

- Economic deprivation
- Low levels of education
- Low status occupations
- Social segregation
- Lack of control over conditions of poverty
- Can't participate in "normal" activities

Health Outcomes

- Pervasive sense of powerlessness
- Low self-esteem
- High incidence of psychological illness and depression
- Tendency toward self-destructive behaviour (e.g., alcohol and drug abuse).

Social Stress

Conditions of Poverty

- Economic/education/ occupational oppression
- Family fragmentation
- Social alienation
- Racism
- Powerlessness

Health Outcomes

- High incidence of stress-related disease
- High incidence of violent behavior
  - child abuse
  - suicide
  - homicide
- High incidence of mental illness
- Chronic anxiety and depression

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Job Insecurity

Conditions of Poverty

- Employment in marginal sector economy
- Seasonal employment
- Underemployment
- Unemployment
- High vulnerability during economic downturns

Health Outcomes

- Psychological stress
- Alcohol and drug abuse
- Increased mortality rates
- Increased mental illness
- Increased incidents of suicide, homicide, imprisonment

Poor Working Conditions

Conditions of Poverty

- Non-unionized
- Low wages
- Few or no fringe benefits
- Long hours of work
- Strict supervision
- Job ghettos - little upward mobility
- Piecework
- Arbitrary dismissal
- Exposure to hazardous chemicals
- Exposure to dangerous equipment
- Poor lighting, heating, ventilation, sanitation in the workplace

Health Outcomes

- Restricted recognition and treatment of illness
- Fatigue
- Work-related injuries and deaths
- Chronic anxiety
- Permanent disability
- Low levels of physical fitness
- Reduced ability to alleviate illness by medical-techological means

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Limits on Health Behaviour and Perceptions of Illness

Conditions of Poverty

- High incidence of morbidity
- Economic outcomes of poverty
  - inadequate child care
  - inability to purchase prescriptions
  - lost wages through time off work
  - loss of job through time off work due to illness

Health Outcomes

- Desensitization to symptoms of illness
- Ignored symptoms of illness
- Greater severity of illness impact
- Inability to comply with treatment regimes

Limits on Utilization of Health Services

Conditions of Poverty

- Low levels of education
- Unawareness of available services
- Unfamiliarity with overall health care system
- Low symptom recognition
- Sense of powerlessness
- Inability to assert service demands
- Alienation from middle/upper class health professionals
- Lack of transportation and child care

Health Outcomes

- Failure to seek appropriate or necessary medical treatment
- Access to health care system but quality of care differs
- Development of severe illness
- Poor dental health

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Limits on
Practice of Preventive Health Measures

Conditions of Poverty

- Low levels of education
- Orientation to immediate demands of subsistance living
- Sense of powerlessness
- Unfamiliarity with concept/ methods of prevention
- No regular source of medical care

Health Outcomes

- Higher mortality rates from chronic disease
- Continuation of negative health behaviours (smoking, alcohol consumption,etc.)
- Women suffer high risk pregancies
- Higher incidence of infant prematurity/retardation
- Higher morbidity rates throughout lifecycle

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